603018, was dredged by the *Eolis, Jr.* by J. B. Henderson at the entrance of English Harbour, Antigua, Lesser Antilles, June 21, 1918.

Type locality.—Southeast of Loggerhead Key, Dry Tortugas, Florida. Dredged in 40 to 46 fathoms by W. L. Schmitt from the *Anton Dohrn*, June 21, 1932.

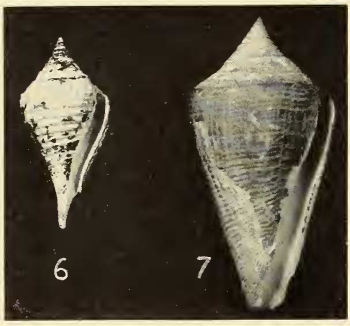

FIG. 6.—*Conus clarki*, n. sp., holotype. FIG. 7.—*Conus austini*, n. sp., holotype. (Both natural size.)

Range.—From Dry Tortugas, Fla., south to Antigua Island, Lesser Antilles.

Remarks.—This species is similar to *C. stimpsoni* Dall but differs in being larger, having raised spiral cords instead of incised grooves, having numerous fine but distinct axial striae between the cords, and lacking any color markings. A young specimen of *C. austini* displays a number of axial wrinkles in the middle of the body whorl, a variable character common to some Miocene fossil species.

A similar species exists in the Gurabo formation, Dominican Republic (Miocene). Specimens of this fossil are in the U. S. National Museum, mixed in with lots labeled *C. planiliratus* Sowerby. It is apparently undescribed and differs from the Recent *C. austini* in having a slightly shorter spire, being half as high and rarely showing the tiny, angled keel on the shoulder of the whorls in the spire. Otherwise the shape and sculpture are extremely similar. *C. stenostoma* Sowerby, a Miocene fossil from the Domican Republic, is also very close but has a very low spire and a sharper shoulder.

MALACOLOGY.—*A new scaphopod mollusk,* Cadulus austinclarki, *from the Gulf of California.*[1] WILLIAM K. EMERSON, Research Fellow, Allan Hancock Foundation. (Communicated by Harald A. Rehder.)

A recent visit to the United States National Museum provided me an opportunity to examine the Scaphopoda contained in the vast collection of the division of mollusks. A previously unrecognized species of *Cadulus* from the Gulf of California is here described.

I am indebted to Dr. Harald A. Rehder, curator of mollusks, for access to the facilities of the division, and to Frederick M. Bayer, assistant curator of marine invertebrates, for providing the camera-lucida drawing and the photograph. I take pleasure in dedicating this new species to Austin H. Clark, retiring curator of echinoderms in the United States National Museum.

Family SIPHONODENTALIIDAE

Genus **Cadulus** Philippi, 1844

Genotype (by monotypy): *Dentalium ovulum* Philippi, 1844, Recent; Mediterranean Sea.

Subgenus **Platyschides** Henderson, 1920

Subgenotype (by original designation): *Cadulus grandis* Verrill, 1884; Recent, West Atlantic, north of Cape Hatteras.

Shell small to relatively large, moderately curved, greatest swelling between the middle and oral aperture, posterior portion and aperture slightly flattened dorsoventrally; surface without sculpture, smooth and polished; apex possessing four rather broad, but shallow notches; white.

This group differs from the subgenus *Polyschides* in having the apical notches greatly reduced. The slits vary in size from small indentations, which appear as chipped-out portions of the margin, to minute features requiring considerable magnification in order to ascertain the structure. There are many Recent and Tertiary species.

Cadulus (Platyschides) austinclarki, n. sp.
Figs. 1, 2

Shell is minute, fairly solid, vitreous, semi-transparent, very slender, moderately curved,

[1] Received October 6, 1950.

FIG. 1.—*Cadulus* (*Platyschides*) *austinclarki*, n. sp.: Holotype, approximately ×20.

with the greatest diameter approximately two-fifths the distance from the oral aperture. The swelling is gradual and approaches uniformity, the equator not being conspicuously bulbular and the convex face forming a nearly uninterrupted arc. The outline of the concave side is very regular except for the area of slight equatorial swelling. The oral (anterior) aperture is constricted, slightly compressed dorsoventrally, but nearly circular in section; apertural margin is slightly oblique. Apex is not much attenuated, relatively large, circular in outline, with a rather oblique margin. The apical characters are minute but well defined. The apex has four shallow notches separated by as many lobes of nearly equal size. The slits are subtriangular in shape, very shallow, with concave pair slightly deeper; the lobes are subconical, with the greatest height of the lobe composed of the inner shell layer, the outer margin being beveled so as to provide a thin edge to the lobes (Fig. 2). The prominence of the lobes varies with individuals. In some specimens the vitreous shell is clouded by semiopaque circular zones producing alternate rings of more or less translucency.

Measurements.—Holotype, 4.4 mm long; diameter of apical orifice 0.35 mm; apertural diameter 0.55 mm. None of the paratypes measures more than 5 mm in length.

Remarks.—The extremely small size, narrowness, and distinctive apical characters serve to distinguish this species from all other Eastern Pacific forms. No living species thus far described from the Eastern Pacific approaches this species. The most similar living species appears to be *Cadulus* (*Platyschides*) *nitidus* Henderson (1920) from Mayagüez Harbor, Puerto Rico, in 25 fathoms. Though this West Atlantic species has similar apical features, it is longer and more attenuated and possesses even less equatorial swelling than *Cadulus austinclarki*. *Cadulus* (*Platyschides*) *parvus* Henderson (1920) from the Florida keys and off Barbados possesses nearly the same general outline but has a longer shell with more prominent apical features. *Cadulus* (*Platyschides*) *amiantus* Dall (1889) from off Bahia Honda, Cuba, is a larger more curved species with a greater equator. *Cadulus* (*Platyschides*) *miamiensis* Henderson (1920) from off Fowey Light, Fla., in 209 fathoms, is a much larger, more curved species with entirely different apical characters.

The National Museum records indicate that this new species is limited to the warm waters of the Panamic province. This is the first representative of the subgenus *Platyschides* reported from the Eastern Pacific region. Intensified collecting in this area will undoubtedly reveal the presence of other species belonging to this group.

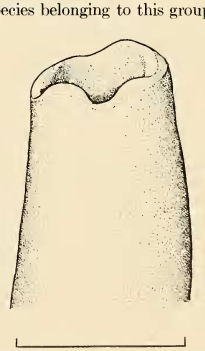

FIG. 2.—*Cadulus* (*Platyschides*) *austinclarki*, n. sp.: Holotype, apical features greatly magnified, a $\frac{3}{4}$-oblique view with the concave face on the left side: line represents 0.5 mm.

Type locality.—Santa Inez Bay, Baja California (Gulf of California), west around Santa Inez Point, dredged in 6–12 feet of water in fine black sand; J. Hawkins, Jr., collector, March 30, 1940.

Range.—Santa María Bay, lat. 24°45′W, west coast of Baja California, Mexico (in Gulf of California: Santa Inez Bay, 27°N), to Panama City, lat. 8°50′N., and the Galápagos Islands, 1°N.

Types.—Holotype: U.S.N.M. no. 564527. Paratypes: 39 in number, U.S.N.M. no. 602347.

Records (latitudinal data approximate).—

West Coast of Baja California, Mexico

Santa María Bay, 24° 45′ N., boat dredge, Bartsch (8).

Cape San Lucas, Bartsch (1).

East Coast of Baja California, Mexico

Fraile Bay, 23° 23′ N., 10–30 feet, coarse, gray sand, Hawkins (5).

Pichilinque Bay, 24° 13′N., Bartsch (18); 24° 13′N., 20–30 feet, Hawkins (2).

La Paz Bay, 24° 15′N., all Hawkins: Between La Paz and El Mogote, 4–6 feet, on gray sandbar (2); north of east end of El Mogote, 1 fm., black sand (2); east point of El Mogote, low tide on sandy beach (dead) (4); ½ mile southeast of Prieta Point, 2 fms., gray sand (1); 2¼ miles north of La Paz, 1–2 fms., on bar off Caruanito Rock, gray sand (1).

San Carlos Bay, 25° 18′N., 2–3 fms., fine black sand bottom, Hawkins (1).

Conception Bay, west end of Coyote Bay, 26° 53′N., 10–12 feet in cove, Hawkins (1).

Santa Inez Bay, 27° N., Hawkins: 2 miles west of Santa Inez Point, 4½ fms., ½ mile offshore in coarse gray sand (6); west around Santa Inez Point, 6–12 feet in cove, fine black sand (40), types.

Republic of Panama

Panama City, 8° 50′N., Zetek (5).

Panama, Zetek (9) [tips broken].

Galápagos Islands

Near Galápagos Islands, 1° 21′N., 89° 40′W., U.S.F.C. 2813, 40 fms. (25±) [tips broken].

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ZOOLOGY.—*The brittle-stars of the United States Navy Antarctic Expedition 1947–48.*[1] Austin H. Clark, U. S. National Museum.

In a previous article (this Journal, **40:** 335–337, 1950) the Crinoidea, Echinoidea, and Asteroidea of the Navy's Antarctic Expedition of 1947–48 were described. The collection includes 11 species of Ophiuroidea, none of them new although several are of much interest.

The literature on the Antarctic echinoderms has recently been brought up to date by the magnificent series of *Discovery* reports based upon the work of the *Discovery, Discovery II*, and *William Scoresby* from 1925 to 1935. In this series the report on the Echinoidea and Ophiuroidea by Th. Mortensen was published in 1936; on the Crinoidea (with bibliography) by D. Dilwyn John in 1938; and on the Asteroidea (with bibliography) by Walter K. Fisher in 1940.

A detailed account of the faunal relations of the Asteroidea, Ophiuroidea, and Echinoidea was published by René Koehler in 1912 (Deuxième Expédition Antarctique Française, 1908–1910, Échinodermes, pp. 186–253), and of the Crinoidea by the present author in 1915 (Die Crinoïden der Antarktis).

OPHIUROIDEA

Ophiacanthidae

Ophicantha disjuncta (Koehler)

Ophiodiplax disjuncta Koehler, British Antarctic Expedition 1907–9, **2,** Biology, pt. 4: 48, pl. 6, figs. 9, 10, 11, pl. 7, fig. 13. 1911.

Localities.—Lat. 66° 35′ S., long. 90° 40′ E.; 150 fathoms; water temperature (surface) 29° F.; December 30, 1947 (1 specimen, U.S.N.M. no. E.7689).

Marguerite Bay; 35 fathoms; water temper-

[1] Published by permission of the Secretary of the Smithsonian Institution. Received September 5, 1950.